Service Information Letters (SIL)

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DALT55 Redesign	November 12, 2014
TT1000A 45V Battery Replacement	November 12, 2014

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Barfield Inc.
4101 N.W. 29th Street
Miami, FL 33142
USA

Phone : + 1 (305) 894 5300
Fax : + 1 (305) 894 5301

Subject: BP4010 Battery Pack Replacement

Dear Customer:

This letter is to inform you that Barfield strongly recommends the replacement of the BP4010 Battery used on our 1811 Series Pitot-Static testers with Digital Instruments. For more technical details regarding the replacement of the BP4010 Battery, please refer to Service Information Letter (SIL) 88-102-02111-1 (Rev C) titled "BP4010 Battery Pack Recall" found on the Barfield Inc. website (www.barfieldinc.com). To access this file from the Barfield Inc. home page select "Services & Offer" then "Ground Support Test Equipment" then "Technical Publications". At the bottom right corner select the Service Information Letter box.

What happened: In September 2012, Barfield determined that a small percentage of customer units were being returned to Barfield for repair with damage to the Digital Altimeter (DALT55) and Digital Airspeed Instruments used in the 1811 series Pitot-Static Testers. Barfield quickly determined that the damage was occurring when customers charged the BP4010 Battery Pack while installed on the test set.

What to do: To arrange for return of the BP4010 Battery Pack to the proper Barfield service center customers should contact Barfield Ground Support Test Equipment (GSTE) Customer Service at 1-800-321-3900, 1-305-894-5400 or email gsesales@barfieldinc.com.

Warranty Replacement: Barfield will honor warranty of all related battery replacements and failures for 2 years beginning January 1st 2013 through December 31st 2014. This Warranty has the following limitations.

- A customer with a first generation battery B4000 Battery Pack is not affected thus does not qualify for the replacement program.
- Customers must obtain a Return Material Authorization (RMA) number from Barfield GSTE Customer Service prior to returning any BP4010 Battery Packs. Customers returning parts without a valid RMA # could encounter delays and processing charges.
- Barfield is providing the warranty exchange **BP4015** Battery Pack on a one-for-one basis to customers that return their BP4010 Battery Pack(s).
- All units received for repairs at Barfield beginning in January 2013 will automatically include a replacement battery if unit is returned with the old BP4010 Battery Pack.
- Barfield will warrantee parts and labor related to any verified digital battery failures. Any unrelated parts or labor including calibration will be at customer expense.
- All freight costs between customer address and Barfield's Miami Facility will be at the customer expense.
- UPS Ground or International Equivalent shipments between Barfield's Miami Facility and the customer location will be covered by Barfield Inc. Any requested priority shipments from the Barfield's Miami facility to customer address will be at customer expense.

Important interim guidelines: If your Barfield 1811 Series tester has a BP4010 and are unable to obtain a replacement, it is important that you follow the guidelines outlined in SIL 88-102-02111-1 (Rev C).

Barfield is committed to providing the highest quality products, services and support to the aviation industry and apologizes for any inconvenience. Thank you for your immediate attention to this matter and for facilitating the replacement of the BP4010 Battery Packs.

Sincerely

Lewes D. Wingate Jr.
Vice President, Ground Support Test Equipment

AIRCRAFT MAINTENANCE REPAIR OVERHAUL & SUPPORT

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SERVICE INFORMATION LETTER

Regarding

DALT55 & DAS650 Instruments

Instrument can be damaged during Battery charge cycle when using BP4010 / SC3000 charger while attached to instrument.

Recall on BP4010 battery pack

November 12, 2014

Subject: Possible damage to the DALT55 & DAS650 Instruments may occur while charging the **BP4010** battery pack using the **SC3000** charger if the **BP4010** is installed on the Test Set during charging.

CAUTION

*Remove the **BP4010** battery pack from the test set **before charging** when using the **SC3000** charger.* *(See page 3, Figure 4 & 5)*

***Note:** For customers charging the BP4000 or BP4010 battery pack using the Barfield Smart charger (p/n: 137-00012), there are **no issues**.* *(See page 3, Figure 1 & 2)*

The figures on page 3 clearly identify ALL possible battery pack / charger configurations to easily identify which configuration the above CAUTION is addressing and the configurations that work fine and are no concern.

Purpose: To notify customers of a potential problem that exists and how to avoid damaging the DALT55 and or DAS650 Instruments.

History: Recently Barfield has determined that approximately 3% of the units sold during the past 24 months have instruments (DALT55 / DAS650) that were damaged as a result of charging the BP4010 battery pack using the SC3000 charger.

Barfield is working quickly to provide a permanent solution for this problem and will advise customers as soon as possible when the solution is available. As mentioned above, customers using the Smart charger (p/n: 137-00012) are not affected, only customers with the SC3000 chargers.

Note: The damage, when it occurs, results in the instruments not powering on and the instruments will remain inoperative. If the Instrument power is on, and the recommended calibration interval has been followed, the user can continue using the Instruments with confidence. Barfield requests that the user follow the CAUTION as detailed above.

Configurations: All **1811-A0A** configurations using the BP4010 battery pack and the SC3000 charger.
All **DALT55** and or **DAS650** configurations using the BP4010 battery pack and the SC3000 charger.

Effectivity: Immediately.

Compliance: Immediate compliance with this SIL is recommended to avoid the possibility of damaging your DALT55 and DAS650 instruments.

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SERVICE INFORMATION LETTER

Regarding

DALT55 & DAS650 Instruments

Instruments can be damaged during Battery charge cycle when using BP4010 / SC3000 charger.

Recall on BP4010 battery pack

November 12, 2014

Planning:

Prior to shipping your BP4010 battery pack for warranty consideration, call customer service to confirm availability of **BP4015** (P/N: 137-00030) battery pack.
Barfield will not have inventory of the new BP4015 prior to December 2012.

As a short term solution while waiting for availability of BP4015, continue using the BP4010 battery pack and following the CAUTION detailed on page 1 and illustrated in Figures 1, 2 & 3 on page 3.

Conclusion:

Barfield Inc. is taking a proactive approach in reaching out to its customers and advising them of this charging issue. The short term solution is to remove the BP4010 from the test set while charging using the SC3000 (P/N: 137-00021) charger.

Barfield is working on a long term solution, correcting the BP4010 design and will provide qualifying customers with a warranty replacement battery pack **BP4015** when available.

Warranty Consideration:

Barfield will provide a warranty exchange **BP4015** battery pack **only** to customers that send in their BP4010 battery pack(s).

As of December 2012, all customer units received for calibration or repair will automatically get a replacement BP4015 if their test set has a BP4010 battery pack.
*Note: **Do not** send in your BP4010 for replacement consideration until notified or confirming that the BP4015 is available.*

Barfield is committed to providing the highest quality products, services and support to the aviation industry. Inquiries may be emailed to gsesales@barfieldinc.com.

Thank you for your business and support.

Robert Arnett,
VP Quality

SERVICE INFORMATION LETTER

Regarding

DALT55 & DAS650 Instruments

Instruments can be damaged during Battery charge cycle when using BP4010 / SC3000 charger.

Recall on BP4010 battery pack

November 12, 2014

Always **remove** the battery pack from Test Set before charging:

Smart Charger (P/N: 137-00012)
BP4000 Battery Pack (P/N: 137-00009)

Figure 1

Smart Charger (P/N: 137-00012)
BP4010 Battery Pack (P/N: 137-00020)

Figure 2

SC3000 Charger (P/N: 137-00021)
BP4010 Battery Pack (P/N: 137-00020)
Note: BP4010 is **removed** from Test Set

Figure 3

DO NOT charge **BP4010** battery while it is attached to the test set:

Figure 4

Figure 5

SERVICE INFORMATION LETTER

For

2312G-XX / TT1000A / TT1200 / TT1200A

Turbine Temperature Test Set

November 7, 2014

Subject: Usage of obsolete documentation in the calibration of the Barfield Turbine Temperature Tester product lines.

Purpose: The concern Barfield Inc. (Barfield) has is that obsolete Technical Manuals and calibration procedures widely distributed via the internet are being used in the certification of the Barfield Turbine Temperature Tester products. The obsolete technical documentation contains calibration standards and procedures which no longer meet Barfield or industry standards and should not be used in the service of Barfield equipment. In an effort to ensure that Barfield products maintain quality, accuracy and industry standards, Barfield has reviewed and revised the calibration procedures for our Models 2312G-XX, T1000A, TT1200, TT1200A Turbine Temperature Test sets.

Below are the calibration procedures which have now been made **obsolete:**

Document Number	Old Revision	Old Revision Date
57-101-00550 (2312-XX)	N/A	Nov 30, 1983
19-101-00901 (TT1000A)	C	Oct 4, 2011
57-101-00901 (TT1000A)	N/A	Sept 28, 1984
20-101-00920-1 (TT1200)	A	Nov 20, 1995
19-101-00930 (TT1200A)	E	Nov 18, 2010

This is a concern for those customers that have their units calibrated by a facility **not** using the authorized calibration standard and/or procedures. For these customers we recommend returning your unit(s) to Barfield or an authorized service facility listed in this letter for calibration / verification service to ensure that operational and accuracy compliance is maintained.

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SERVICE INFORMATION LETTER

For

2312G-XX / TT1000A / TT1200 / TT1200A

Turbine Temperature Test Set

November 7, 2014

Configurations: The following test set models, regardless of installed Modifications and or Options are affected by these SIL requirements:

Part Number	Model Number
101-00550 through 101-00557	2312G-XX
101-00901	TT1000A
101-00920	TT1200
101-00930	TT1200A
101-00930-OH58D	TT1200A

Effectivity: Next scheduled annual calibration cycle or sooner should any repair or service action be required.

Compliance: Compliance with this SIL at next calibration cycle is recommended for all Barfield Turbine Temperature Testers. The recommended annual (every 12-month) re-certification should be performed by Barfield Inc. or a calibration facility listed in this SIL using the latest revised calibration procedure(s) listed below:

Document Number	New Revision	New Revision Date
19-101-00550 (2312-XX)	B	11/12/2014
19-101-00901 (TT1000A)	E	9/19/2014
19-101-00920 (TT1200)	C	11/12/2014
19-101-00930 (TT1200A)	G	9/25/2014

The revised calibration procedures listed above employ superior standards to ensure that calibration uncertainties of acceptable tolerance for each characteristic maintain the correct test accuracy ratios.

Planning: Prior to shipping, call Barfield's Customer Service or an Authorized calibration facility listed below to schedule the recertification of your Barfield Turbine Temperature Tester.

Service Centers: **United States**

Barfield Inc.
4101 NW 29th Street
Miami, FL 33127
Phone: 1-800-321-1039 (US Only)
Phone: 1-305-894-5400
Fax: 1-305-894-5401
GSTE.Service@barfieldinc.com
www.barfieldinc.com

SERVICE INFORMATION LETTER

For

2312G-XX / TT1000A / TT1200 / TT1200A

Turbine Temperature Test Set

November 7, 2014

Service Centers: **United States (Cont)**

Barfield Inc.
1912 West 4th Street
Tempe, AZ 85281
Phone: 1-480-477-2000
Fax: 1-480-477-1999
Email: barfieldphoenix@barfieldinc.com

Aeroframe Airepairs
3914 Willow Lake Blvd.
Memphis, TN. 38118
Phone: 1-901-547-4600
sales@airepairs.com

Express Calibration Services
1803 SW Market St.
Lee's Summit, MO 64082
Phone: 1-816-246-9292
Fax: 1-816-246-9295
Email: custsvc@expresscal.com
Web: www.expresscal.com
POC: Mike Sage

Europe:

EADS SECA
1 Boulevard du 19 mars 1962
BP 50064
95503 GONESSE FRANCE
33 01 30 18 54 12 Telephone
Email: jean.paris@seca.eads.net
Web: www.seca.eads.net
POC: Jean Paris

SERVICE INFORMATION LETTER

For

2312G-XX / TT1000A / TT1200 / TT1200A

Turbine Temperature Test Set

November 7, 2014

Service Centers: **Canada:**

Wright Instruments Ltd
2762 Slough St,
Mississauga ON, L4T 1G3
Phone: (905) 677-7161

Australia:

TR VMS
72 Donaldson Road
Rocklea, 4106
QLD, Australia
Ph: 61 7 3717 9146
Fax: 61 7 3717 9135
Web: www.trvms.com.au

Conclusion: Barfield Inc. is taking a proactive approach in reaching out to its customers and advising them of the potential for unauthorized facilities calibrating our turbine temperature test equipment using obsolete documentation as described above. Barfield strongly recommends the return of ALL units at their next calibration / recertification interval to a Barfield facility or one of the listed authorized calibration facilities to ensure the equipment is performing as designed and in compliance with new test procedures, calibration standard and accuracy requirements.

Barfield is committed to providing the highest quality products, services and support to the aviation industry.

Inquiries may be emailed to gsesales@barfieldinc.com.

Thank you for your business and support.

Robert Arnett
VP Quality

SERVICE INFORMATION LETTER

FOR

TT1200A Turbine Temperature Test Set

BARFIELD P/N 101-00930

Subject: Use of the Barfield TT1200A Turbine Temperature Test Set on the Bell OH-58D Turbine Temperature Indicating System

Purpose: To inform users of a new P/N, the 101-00930-OH58D, that has been created by modifying Test Set TT1200A, in order to ensure compatibility when testing the Bell OH-58D aircraft engine temperature indicating system.

Effectivity: Immediate

Compliance: Compliance with this SIL is MANDATORY for those users who will be performing service work on the OH-58D Engine Temperature Indicating System with the Barfield TT1200A Test Set.

Planning: A statement of this requirement will be included in an upcoming revision of the TT1200A User manual P/N 56-101-00930. A separate supplement to this manual will be prepared for the new P/N. It will explain those operating instructions that are different from the Standard TT1200A, including the use of a new harness that has been specifically designed to interface the new TT1200A with the OH-58D airframe. All existing procedures of the Standard TT1200A Instruction Manual remain effective, except as outlined in the upcoming supplement. Existing Calibration Procedure P/N 20-101-00930 is applicable for both TT1200A P/Ns (the 101-00930 and 101-00930-OH58D).

History: In late 2000 the US Army made Barfield aware of an issue when using the Barfield TT1200 Test Set (P/N 101-00920) on the OH-58D aircraft. The observed error reported was that the aircraft temperature indications were unstable and subject to fluctuations. Through their subsequent testing on the aircraft they made the determination that if the test set chassis was grounded to the airframe then the aircraft indicator readings were stable and accurate.

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Based on these reported findings and their request for an embedded solution, Barfield developed a modification for the TT1200 designated as Option A. This Option consisted of a modification to the TT1200 Test Set panel connector wiring as well as the test set interface cables so that the test set chassis ground was provided by an added third clip lead to the testers cables so as to provide a ground strap to the airframe chassis.

The US Army subsequently procured some number of these Option A configured TT1200 testers specifically for use on the OH-58D aircraft and used them thereafter without report of any further issues.

The TT1200 was made obsolete upon the introduction of the TT1200A Test Set in 2003. The model TT1200A (P/N 101-00930) is an all-new test set sharing no subassemblies with the earlier TT1200 tester (P/N 101-00920). The TT1200A is not a suitable substitute for the TT1200 with Option A.

There was no provision made for grounding the TT1200A Test Set to the airframe as the necessity for doing so is, to our knowledge, unique to the OH-58D aircraft and its installed equipment and wiring configuration. Barfield has never been made aware of any other aircraft engine temperature indicating system which necessitated this grounding for correct operation.

Conclusion: The TT1200A test set can be ordered preconfigured for singular use on the OH-58D aircraft, under the new Barfield P/N 101-00930-OH58D. This newly modified Test Set TT1200A is provided with a specific harness, designed to interface it with the aircraft. The only two Barfield-approved Testers for the Engine Temperature Indicating System of the OH-58D airframe are: the TT1200 with Option A, and the new P/N 101-00930-OH58D.

Inquiries may be emailed to gsesales@barfieldinc.com.

SERVICE INFORMATION LETTER

FOR

DPS400 (P/N 101-01180) Pitot-Static Test Set

Subject: Using the Barfield DPS400 Test Set is on RVSM Certified Aircraft.

Regarding compliances with RVSM, Barfield Inc. defines compliance as meeting or exceeding the widely accepted RVSM test equipment (Ps) "static channel" accuracy specification of ±0.0030 inHg.

Purpose: To inform users how to clearly identify if their DPS400 test set configuration is in compliance to meet / exceed the RVSM accuracy requirement.

Configurations: The following configurations **meet or exceed RVSM accuracy requirements:**
ALL DPS400 (s/n up to 108, must have MOD "H" & "L")
All DPS400 (s/n: 109 thru 289 must have MOD "G" & "L").
All DPS400 (s/n 290 and higher must have MOD "G")

Effectively: Immediate

Compliance: Compliance with this SIL is MANDATORY for those users who will be performing service work on aircraft which are RVSM certified. The DPS400 requires annual (every 12-month) re-certification performed by Barfield or an approved calibration facility to ensure continued compliance with RVSM accuracies and proper test set operation.

Planning: For customers with DPS400 s/n 108 or lower, verify unit I.D. plate indicates both MOD "H" & "L".
For customers with DPS400 s/n 109 to 289, verify unit I.D. plate indicates both MOD "G" & "L".
For customers with DPS400 s/n 290 and above, verify unit I.D. plate indicates MOD "G".
If test set MOD level is does not include the MOD levels described above, contact Barfield customer service.

Conclusion: ALL DPS400 Test Sets that meet the above described MOD levels and are calibrated on an annual (12-month cycle) by Barfield Inc. or an approved calibration facility are in compliance with the accuracy requirements of RVSM.

Inquiries may be emailed to gsesales@barfieldinc.com.

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SERVICE INFORMATION LETTER

FOR

DC-400A ADAPTER MODULE FOR SAAB-FAIRCHILD SF-340

BARFIELD P/N 101-00809

Subject: Errata for User Instruction Manual 56-101-00809, Issued on Jan. 29th, 1988

Purpose: To inform users of the referred Adapter Module of revised testing values (Section 1 of this SIL) and revised calibration procedures (Section 2 of this SIL).

Effectivity: Immediate.

Compliance: Compliance with this SIL is MANDATORY.

Planning: The revised values and procedures indicated in this SIL will be included in an upcoming revision B of the referred manual.

SECTION 1 (REVISED TESTING VALUES)

History: It has been found that the range of capacitance values, indicated in Figures 1, 2, and 5 of the referred manual, need to be modified.

Accomplishment: For Section 1-2, Page 4, paragraph 3.C.(2), Figure 1, apply the table below.

Figure 1 Table of Inboard Individual Probe Values (Revised)

Tank Group	Probe Select Position	Probe Part Number	Capacitance Value (pF)
Inboard	1	40007-0000-0101	4.1 ± 0.5
Inboard	2	40007-0000-0102	28.1 ± 0.5
Inboard	3	40007-0000-0103	29.3 ± 0.5

For Section 1-2, Page 5, paragraph 3.D.(2) (b), Figure 2, apply the table below.

Figure 2 Table of Outboard Individual Probe Values (Revised)

Tank Group	Probe Select Position	Probe Part Number	Capacitance Value (pF)
Outboard	1	40008-0000-0101	23.2 ± 0.5
Outboard	2	40008-0000-0102	20.8 ± 0.5
Outboard	3	40008-0000-0103	19.3 ± 0.5

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For Section 1-2, Page 21, paragraph 9.B.(2), Figure 5, apply the table below.

Figure 5 Individual Probe Values / Location (Revised)

Tank Group	Probe Select Position	Probe Part Number	Capacitance Value (pF)
Inboard	1	40007-0000-0101	4.1 ± 0.5
Inboard	2	40007-0000-0102	28.1 ± 0.5
Inboard	3	40007-0000-0103	29.3 ± 0.5
Outboard	1	40008-0000-0101	23.2 ± 0.5
Outboard	2	40008-0000-0102	20.8 ± 0.5
Outboard	3	40008-0000-0103	19.3 ± 0.5

SECTION 2 (REVISED CALIBRATION PROCEDURES)

History: It has been found that two related calibration procedures of the referred manual are missing one step, which is the same for both procedures and at the same position in the sequence.

Accomplishment: The following two procedures of Section 1-2: Page 17, “Test Procedure for System Calibration Preferred Method, Dry Tank” (subsection 7.C), and Page 19, “Test Procedure for System Calibration Alternate Method, Wet Tank” (subsection 8.C), both are missing the same step, immediately after step (4) “Release the PRESS TO READ CAP (pF) pushbutton.” The new step will read:

(5) Rotate the TEST FUNCTION selector switch to IND AMP.

Current step (5) of both procedures will be renumbered as (6), with the following steps of both renumbered accordingly, in the upcoming revision of this manual.

Inquiries may be emailed to gsesales@barfieldinc.com.

SERVICE INFORMATION LETTER

FOR

DPS400

BARFIELD P/N 101-01180

Subject:	DPS400 New Option Available
Purpose:	To inform customers of a new custom fit option choice for the keypad assembly for the Barfield P/N 101-01180, Digital Pitot Static Tester
Effectivity:	All DPS400 Testers with serial number 443 or greater and produced from January 2001. (Note: Units with serial numbers lower than 443 must be sent to Barfield for evaluation.)
Compliance:	Compliance with this SIL is OPTIONAL.
Planning:	Option C involves a choice for a membrane keypad assembly
History:	The display assembly has been updated to use a membrane keypad to replace the mechanical switch assembly. This new membrane assembly will reduce assembly labor time, repair costs and will provide a new key on the keyboard (engraved **PUMP**) which will allow operators to turn the pumps ON and OFF.
Accomplishment:	New production units will be fitted with the membrane keypad option as a production standard build. This build will be documented as **Option C.** The Test Set maintenance menu will be configured via firmware 33R06N5 to support the new membrane keypad. Customers with field serviceable units interested in this option will need to contact Barfield Sales Department or Customer Technical Support (800-321-1039) for further information or to arrange a return to obtain this new option. Inquiries may be emailed to Techsupport.GSTE@barfieldinc.com.

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SERVICE INFORMATION LETTER

For

DALT55 Digital Altimeter

November 12, 2014

Subject: Redesign of the Barfield Model DALT55.

Note: *For those customers that returned their test set to Barfield for the annual recertification, there is* ***no issue*** *with continued use of these units.*

Purpose: This letter is to inform customers that Barfield Inc. has recently redesigned the DALT55 Digital Altimeter. As a result of the redesign, model number DALT55 will not be affected but part number 101-02184 is replaced with a new part number 101-02186. The new part number (part number 101-02186) altimeter is a 100% Form-Fit-Function replacement for the replaced unit (part number 101-02184).

History: Due to procurement issues with critical components, Barfield Inc. designed a new Model Number DALT55 Digital Altimeter Part Number 101-02186.

Configurations: The following configurations are affected by this design:

Model Number	Part Number
1811D-A0A	101-00164-A0A
1811GA-A0A	101-00185-A0A
1811HA-A0A	101-00184-A0A
DALT55	101-02184

Note: *Products containing either part number 101-02184 or 101-02186 Digital Altimeters meet the requirements described in Federal Aviation Regulation Part 43 Appendix-E* which defines the requirements for accuracy of an aircraft's altimeter and is used as a reference for the accuracy of Pitot-Static testers. These products however *do not meet RVSM accuracy requirements.*

Effectivity: All newly manufactured test sets listed in above configurations will contain a DALT55 with part number 101-02186. Any units received for service determined to have a transducer failure (part number PDCR2200-8860) will require update to new part number. Update would include new transducer, manifold, PC board and hardware to convert to new part number 101-02186.

Compliance: No compliance requirement.

Specifications:

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SERVICE INFORMATION LETTER

For

DALT55 Digital Altimeter

November 12, 2014

Specifications for the discontinued Barfield DALT55 part number 101-002184.

<table>
<tr><th colspan="2">DALT55 (P/N 101-02184)</th></tr>
<tr><td>RANGE</td><td>-1500 to 55,000 ft</td></tr>
<tr><td>ACCURACY</td><td>0.025% Typical FS over complete operating temperature range.
Specific accuracies at certain altitudes are:
<table>
<tr><th>Altitude</th><th></th><th>Altitude</th><th></th></tr>
<tr><td>-1,500 Ft</td><td>± 7 Ft</td><td>30,000 Ft</td><td>± 20 Ft</td></tr>
<tr><td>0 Ft</td><td>± 7 Ft</td><td>40,000 Ft</td><td>± 30 Ft</td></tr>
<tr><td>10,000 Ft</td><td>± 10 Ft</td><td>50,000 Ft</td><td>± 48 Ft</td></tr>
<tr><td>20,000 Ft</td><td>± 14 Ft</td><td>55,000 Ft</td><td>± 62 Ft</td></tr>
</table>
Note: When displaying altitude in Ft: Feet or M: Meters, the pressure altitude calculation is based on a baro set of 29.921 inHg = 1013.2 mb.
Note: The Baro Set value cannot be changed, it is set at 29.921 inHg.</td></tr>
<tr><td>STABILITY</td><td>0.05% FS (Typical) over 12 months.
Note: This tolerance represents the typical stability over a 12 month period. If tighter tolerances are required, the calibration interval should be reduced or establish proof of stability.</td></tr>
<tr><td>PRESSURE RANGE</td><td>3.425 inHg to 32 inHg absolute</td></tr>
<tr><td>ROC</td><td>VSI (Vertical Speed Displayed)
± 50 Ft/min (VSI > 150 Ft/min)
± 10 M/Min (VSI > 40 M/min)
Note: Displays “0” below 100 Ft/min & 30 M/min</td></tr>
<tr><td>LEAK TEST MODE</td><td>Measures Leak Rate
After 1 minute of stabilization and the minimum of 1 minute Leak Test Interval, the Leak Test accuracy:
± 3 Ft/min
± 1 M/min</td></tr>
<tr><td>TEMPERATURE RANGE:</td><td>OPERATING: -10º C to 50º C (-4° F to 122° F)
STORAGE: -30º C to 60º C (-22° F to 140° F)</td></tr>
</table>

SERVICE INFORMATION LETTER

For

DALT55 Digital Altimeter

November 12, 2014

Specifications for the new Barfield DALT55 part number 101-002186.

<table>
<tr><th colspan="2">DALT55 (P/N 101-02186)</th></tr>
<tr><td>ALTITUDE RANGE</td><td>-1,500 to 55,000 ft</td></tr>
<tr><td>ACCURACY</td><td>0.020% FS Typical, 0.040% FS (Max) over complete operating temperature range. Specific accuracies at certain altitudes are:
<table>
<tr><th>Altitude</th><th></th><th>Altitude</th><th></th></tr>
<tr><td>-1,500 Ft</td><td>± 7 Ft</td><td>30,000 Ft</td><td>± 20 Ft</td></tr>
<tr><td>0 Ft</td><td>± 7 Ft</td><td>40,000 Ft</td><td>± 30 Ft</td></tr>
<tr><td>10,000 Ft</td><td>± 10 Ft</td><td>50,000 Ft</td><td>± 48 Ft</td></tr>
<tr><td>20,000 Ft</td><td>± 14 Ft</td><td>55,000 Ft</td><td>± 62 Ft</td></tr>
</table>
Note: When displaying altitude in Ft: Feet or M: Meters, the pressure altitude calculation is based on a baro set of 29.921 inHg = 1013.2 mb.
Note: The Baro Set value cannot be changed, it is set at 29.921 inHg.</td></tr>
<tr><td>STABILITY</td><td>0.025% FS (Max) over 12 months.
Note: This tolerance represents the stability over a 12 month period. If tighter tolerances are required, the calibration interval should be reduced or establish proof of stability.</td></tr>
<tr><td>PRESSURE RANGE</td><td>3.425 inHg to 38 inHg absolute</td></tr>
<tr><td>ROC</td><td>VSI (Vertical Speed Displayed)
± 50 Ft/min (VSI > 150 Ft/min)
± 10 M/Min (VSI > 40 M/min)
Note: Displays “0” below 100 Ft/min & 30 M/min</td></tr>
<tr><td>LEAK TEST MODE</td><td>Measures Leak Rate
After 1 minute of stabilization and the minimum of 1 minute Leak Test Interval, the Leak Test accuracy:
± 3 Ft/min
± 1 M/min</td></tr>
<tr><td>TEMPERATURE RANGE:</td><td>OPERATING: -10º C to 50º C (-4° F to 122° F)
STORAGE: -30º C to 60º C (-22° F to 140° F)</td></tr>
</table>

SERVICE INFORMATION LETTER

For

DALT55 Digital Altimeter

November 12, 2014

Planning: Prior to shipping, call customer service to schedule the recertification of your Pitot-Static Test Set.

Conclusion: Barfield Inc. is taking a proactive approach in advising its customers of the newly designed Digital Altimeter used in our pitot-static products. Barfield recommends the return of ALL units at their next calibration / recertification interval so that Barfield as OEM, can ensure the equipment is performing as designed and in compliance with accuracy requirements.

Barfield is committed to providing the highest quality products, services and support to the aviation industry.

Inquiries may be emailed to gsesales@barfieldinc.com.

Thank you for your business and support.

Robert Arnett
VP Quality

SERVICE INFORMATION LETTER

For

TT1000A

Turbine Temperature Test Set

November 12, 2014

Subject: Obsolescence and replacement of a critical component within the Barfield TT1000A.

Purpose: In June 2012 Barfield Inc. (Barfield) was informed by the Eveready Battery Company that a critical component used in the TT1000A product has been made obsolete. Eveready Part number 415 a 45V Carbon Zinc Battery NEDA 213 is no longer manufactured and has very limited availability. The Eveready 415 is used in the TT1000A to provide the required 45 volt excitation for testing the Insulation breakdown of the aircraft EGT/IGT system and other Type K thermocouple based systems. Barfield was unable to identify a Form-Fit-Function (FFF) replacement for the 415 battery.

Configurations: The following test set model, regardless of installed Modifications and or Options is affected by this SIL recommendation:

Part Number	Model Number
101-00901	TT1000A

Purpose: Replacement of the 45V battery.

Solution: Barfield has a newly designed replacement module "45V Battery Replacement Converter" to mimic the operational specifications and capabilities of the Eveready 415 45V battery. Barfield part number 137-08001 is a module designed to be used with an off-the-shelf 9V alkaline battery to produce the 45V output voltage needed to properly operate the Barfield TT1000A. Unless damaged the 137-08001 does not require replacement in the future, only the 9V Battery. This solution achieves two goals, first is to replace the obsolete Eveready 415 battery and second replaces a specialty battery having a limited availability with an off-the-shelf solution available internationally.

Compliance: Customer compliance with this SIL is optional. The obsolete Eveready 415 battery is considered a consumable part thus will require eventual replacement as they fail.

All new Barfield TT1000A Turbine Temperature Testers manufactured after April, 2013 will include the new 137-08001 module and 9V battery. Any 45V Batteries identified as unserviceable during a repair or calibration activity should be replaced with new 137-08001.

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SERVICE INFORMATION LETTER

For

TT1000A

Turbine Temperature Test Set

November 12, 2014

Availability: The 137-08001 will be stocked by Barfield and our authorized distributors and service centers beginning May 2013. Please call Barfield's Customer Service or an Authorized calibration facility listed below to purchase a 137-08001 45V Battery Replacement Converter or schedule the recertification of your Barfield Turbine Temperature Tester.

Installation: Installation of the 137-08001 45V Battery Replacement Converter is outlined in Barfield document 60-137-08001.

Service Centers: **United States**

Barfield Inc.
4101 NW 29th Street
Miami, FL 33127
Phone: 1-800-321-1039 (US Only)
Phone: 1-305-894-5400
Fax: 1-305-894-5401
GSTE.Service@barfieldinc.com
www.barfieldinc.com

Barfield Inc.
1912 West 4th Street
Tempe, AZ 85281
Phone: 1-480-477-2000
Fax: 1-480-477-1999
Email: barfieldphoenix@barfieldinc.com

Aeroframe Airepairs
3914 Willow Lake Blvd.
Memphis, TN. 38118
Phone: 1-901-547-4600
sales@airepairs.com

SERVICE INFORMATION LETTER

For

TT1000A

Turbine Temperature Test Set

November 12, 2014

Service Centers: **United States (Cont)**

Express Calibration Services
1803 SW Market St.
Lee's Summit, MO 64082
Phone: 1-816-246-9292
Fax: 1-816-246-9295
Email: custsvc@expresscal.com
Web: www.expresscal.com
POC: Mike Sage

Europe:

EADS SECA
1 Boulevard du 19 mars 1962
BP 50064
95503 GONESSE FRANCE
33 01 30 18 54 12 Telephone
Email: jean.paris@seca.eads.net
Web: www.seca.eads.net
POC: Jean Paris

Service Centers: **Canada:**

Wright Instruments Ltd
2762 Slough St,
Mississauga ON, L4T 1G3
Phone: (905) 677-7161

SERVICE INFORMATION LETTER

For

TT1000A

Turbine Temperature Test Set

November 12, 2014

Service Centers: **Australia:**

TR VMS
72 Donaldson Road
Rocklea, 4106
QLD, Australia
Ph: 61 7 3717 9146
Fax: 61 7 3717 9135
Web: www.trvms.com.au

Barfield is committed to providing the highest quality products, services and support to the aviation industry. Additional service centers are being evaluated and approved to better serve our customer. Please visit the Barfield Inc. website for the most up-to-date list of service centers.

Inquiries may also be emailed to gsesales@barfieldinc.com.

Thank you for your business and support.

Robert Arnett
VP Quality